

IN THE CLAIMS:

1. (Currently amended) The A process for spray polymerization in an inert atmosphere of a monomer solution comprising free-radically polymerizable monomers ~~when the~~ wherein a water content of the monomer solution is in the range from 60% to 95% by weight and the a reaction temperature is in the a range from 90 to 300°C.

2. (Currently amended) The process ~~accord-~~
~~ing to~~ of claim 1 ~~when~~ wherein the water content of the monomer solution is at least 65% by weight.

3. (Currently amended) The process ~~accord-~~
~~ing to~~ of claim 1 ~~when~~ wherein the water content of the monomer solution is at least 70% by weight.

4. (Currently amended) The process ~~accord-~~
~~ing to any of the aforementioned claims when~~ claim 1
wherein the reaction temperature is in the range from 150 to 210°C.

5. (Currently amended) The process ~~accord-~~
~~ing to any of the aforementioned claims when~~ claim 1
wherein the free-radically polymerizable monomer is acrylic acid ~~and/or~~, methacrylic acid, or a mixture thereof.

6. (Currently amended) The process ~~according to~~ of claim 5 when wherein the acrylic acid ~~and/or,~~ methacrylic acid, or mixture thereof is at least 40% neutralized.

7. (Currently amended) The process ~~according to any of claims~~ claim 1 to 4 when wherein the free-radically polymerizable monomer is a mixture of acrylic acid and potassium acrylate.

8. (Currently amended) ~~Water-swellable polymers obtainable~~ A water-swellable polymer prepared by a the process according to claims of claim 1 to 7.

9. (New) The process claim 2 wherein the reaction temperature is in the range from 150 to 210°C.

10. (New) The process of claim 3 wherein the reaction temperature is in the range from 150 to 210°C.

11. (New) The process of claim 2 wherein the free-radically polymerizable monomer is acrylic acid, methacrylic acid, or a mixture thereof.

12. (New) The process of claim 11 wherein the acrylic acid, methacrylic acid, or mixture thereof is at least 40% neutralized.

13. (New) The process of claim 3 wherein the free-radically polymerizable monomer is acrylic acid methacrylic acid, or a mixture thereof.

14. (New) The process of claim 13 wherein the acrylic acid, methacrylic acid, or mixture thereof is at least 40% neutralized.

15. (New) The process of claim 4 wherein the free-radically polymerizable monomer is acrylic acid, methacrylic acid, or a mixture thereof.

16. (New) The process of claim 15 wherein the acrylic acid, methacrylic acid, or mixture thereof is at least 40% neutralized.

17. (New) The process of claim 2 wherein the free-radically polymerizable monomer is a mixture of acrylic acid and potassium acrylate.

18. (New) The process of claim 3 wherein the free-radically polymerizable monomer is a mixture of acrylic acid and potassium acrylate.

19. (New) The process of claim 4 wherein the free-radically polymerizable monomer is a mixture of acrylic acid and potassium acrylate.

20. (New) The water-swellaable polymer of claim 8 wherein the free-radically polymerized monomer is acrylic acid, methacrylic acid, or a mixture thereof.